

APERTURE MASKS FOR CIRCUIT FABRICATION

ABSTRACT

5 In various embodiments, the invention is directed to aperture mask deposition techniques for use in creating integrated circuits or integrated circuit elements. In other
embodiments, the invention is directed to different apparatuses that facilitate the
deposition techniques. The techniques generally involve sequentially depositing material
through a number of aperture masks formed with patterns that define layers or portions of
various layers of a circuit. In this manner, circuits can be created using aperture mask
10 deposition techniques, without requiring any etching or photolithography, which is
particularly useful when organic semiconductors are involved. The techniques can be
useful in creating circuit elements for electronic displays, low-cost integrated circuits such
as radio frequency identification (RFID) circuits, and other circuits.